

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1 – 40. (CANCELED)

41. (ORIGINAL) A method of performing a non-ablative phototherapy to a patient's skin, the method comprising:

transmitting a laser energy into a target tissue, the laser energy including pulses of light having a fluence of 8 J/cm² and 20 J/cm², and a pulse width of in the range of approximately 100 microseconds and 3000 microseconds; and
heating the target tissue to a temperature of at least forty degrees Celsius.

42. (ORIGINAL) The method of claim 41, comprising maintaining the temperature of at least forty degrees Celsius for a predetermined time.

43. (ORIGINAL) The method of claim 41, wherein the laser energy has a peak power greater than approximately 10 kW.

44. (ORIGINAL) The method of claim 43, wherein the laser energy has a peak power pulse of approximately 14 kW.

45. (ORIGINAL) The method of claim 41, wherein heating the target tissue to a temperature of at least forty degrees Celsius comprises a temperature between approximately forty-five degrees Celsius and approximately fifty degrees Celsius.

46. (ORIGINAL) The method of claim 41, wherein the laser energy comprises a fluence between approximately 10 J/cm² and approximately 20 J/cm².

47. (ORIGINAL) The method of claim 41, wherein transmitting the laser energy is carried out by pulsing the laser energy onto a skin surface of a patient.

48. (ORIGINAL) The method of claim 47, wherein the laser energy has a pulse duration between approximately 100 microseconds and approximately 1000 microseconds.

49. (ORIGINAL) The method of claim 41, wherein the laser energy is near infrared.

50. (ORIGINAL) The method of claim 49, wherein the laser energy has a wavelength of 1064 nm.

Claims 51 – 60. (CANCELED)

61. (ORIGINAL) The method of claim 41, wherein heating effects a reduction of wrinkles.

62. (ORIGINAL) The method of claim 41, wherein heating effects a texturing of a surface of the skin.

63. (ORIGINAL) The method of claim 41, wherein heating effects a reduction of scar tissue.

64. (WITHDRAWN) The method of claim 41, wherein heating effects a reduction of diffuse redness in the skin.

65. (ORIGINAL) The method of claim 41, wherein heating effects a reduction in a size of a pore.

66. (ORIGINAL) The method of claim 41, wherein heating effects a reduction of striae in the skin.

67. (CURRENTLY AMENDED) A method of providing a phototherapy treatment to an area of skin, the method comprising:

generating a plurality of pulses of laser light;

directing the plurality of pulses of laser light to a surface of an area of tissue being treated; and

wherein each pulse has a fluence of between approximately 8 J/cm² and 20 J/cm², and has a pulse duration of between approximately 100 μ seconds and 1000 μ seconds.

68. (ORIGINAL) The method of claim 67, further comprising:

selecting a dimension of the pulses of light such that the pulses of light directed to the area of tissue produces a spot size on a surface of the area of tissue being treated of between approximately 3 mm and 10 mm.

69. (ORIGINAL) The method of claim 67, further comprising:

selecting a dimension of the pulses of light such that the pulses of light directed to the area of tissue produce a spot size on a surface of the area of tissue being treated of approximately 5 mm.

70. (ORIGINAL) The method of claim 67, wherein the generating a plurality of pulses of light includes generating the pulses of light at a repetition rate in a range of between approximately 2 hz and 12 hz.

71. (ORIGINAL) The method of claim 67, wherein the generating a plurality of pulses of light includes generating the pulses of light at a repetition rate a range of between approximately 5 hz and 7 hz.

72. (ORIGINAL) The method of claim 67, further comprising:

wherein the directing of the plurality of pulses of light to the surface of the area of tissue being treated, includes continuing the directing so that a treatment pedestal temperature in the tissue being treated is reached, and after reaching the treatment

pedestal temperature continuing the directing of the plurality of pulses of light to the surface of the area tissue being treated such that a plurality of treatment temperature spikes are produced in the tissue.

73. (ORIGINAL) The method of claim 67, wherein the pulses of light include light in the near infrared range.

74. (ORIGINAL) The method of claim 67, wherein the pulses of light have a wavelength of approximately 1064 nm.

75. (ORIGINAL) The method of claim 67, wherein the pulses of light are generated by a YAG laser.

76. (WITHDRAWN) The method of claim 67, further comprising:
continuing the directing of the plurality of pulses light to the surface of the area of tissue being treated such that hemoglobin in the tissue area absorbs sufficient energy to reduce a diffuse redness in skin.

77. (ORIGINAL) The method of claim 67, further comprising:
continuing the directing of the plurality of pulses light to the surface of the area of tissue being treated such that treatment provides for at least one of the following group of treatments to the skin: facial vein reduction, improvement of skin texture, decrease of pore size, reduction of rosacea, reduction of diffuse redness, reduction of striae, and reduction of scarring.

78. (WITHDRAWN) The method of claim 67, further comprising:
continuing the directing of the plurality of pulses light to the surface of the area of tissue being treated such that hemoglobin absorbs sufficient energy to cause thermal damage sufficient to treat blood vessels.

79. (WITHDRAWN) The method of claim 67, further comprising:
continuing the directing of the plurality of pulses light to treat blood vessels in the area of tissue being treated.

80. (ORIGINAL) The method of claim 67, wherein the pulses of light have a power of at least 10kW.

81. (CURRENTLY AMENDED) A method of providing a non-ablative treatment to an area of skin, the method comprising:

selecting the area of skin for treatment the area of skin being greater than approximately 2cm²;

providing a laser light source that outputs pulses of light having a fluence of greater than approximately 8 J/cm² and less than approximately 20 J/cm², and a pulse width of between approximately 100 μ seconds and 1000 μ seconds;

applying pulses of light from the laser light source to the area skin, wherein each pulse of light applied to the skin produces a light spot on the skin, and a spot size covers a portion of the area of skin being treated; and

moving the laser light source to distribute pulses of light over the area skin being treated.

82. (ORIGINAL) The method of claim 81, wherein the spot size is between approximately 3 mm to 10 mm.

83. (ORIGINAL) The method of claim 81, wherein pulses of light are generated at a frequency in the range of approximately 2 hz to 12 hz.

84. (ORIGINAL) The method of claim 81, wherein the pulses of light include light in the near infrared range.

85. (ORIGINAL) The method of claim 81, wherein the pulses of light are generated by an Nd:YAG laser.

86. (ORIGINAL) The method of claim 81, wherein the pulses of light have a wavelength of 1064 nm.

87. (WITHDRAWN) The method of claim 81, wherein the light pulses operate to treat blood vessels in the selected area of skin.

88. (WITHDRAWN) The method of claim 81, wherein the light pulses operate to reduce diffuse redness in the selected area of skin.

89. (ORIGINAL) The method of claim 81, further comprising:
continuing the applying pulses of light from the light source to the area skin, such that the pulse of light generate a treatment temperature pedestal in the skin, and after the treatment temperature pedestal has been reached continuing the applying of pulses of light to the skin to create a plurality of treatment temperature spikes in the area of skin.

90. (ORIGINAL) The method of claim 81, wherein the area of skin selected for treatment is an area of approximately 20 cm².

91. (ORIGINAL) The method of claim 81, wherein at least approximately 400 pulses of light are applied to the selected area of skin for treatment.

92. (ORIGINAL) The method of claim 81, wherein pulses are applied to the selected area of tissue continuously for a time period in the range of approximately 1 minute to 5 minute.

Claim 93. (CANCELLED)

94. (ORIGINAL) A method of performing a non-ablative phototherapy to a patient's skin, the method comprising:

applying a light energy to a selected treatment area to heat the selected treatment area to a treatment pedestal temperature;

generating localized temperature spikes in a target tissue in the selected treatment area.

95. (ORIGINAL) The method of claim 94, further comprising:
continuing the applying of light energy to the surface of the selected treatment area such that phototherapy provides for at least one of the following group of treatments to the skin: facial vein reduction, improvement of skin texture, decrease of pore size, reduction of rosacea, reduction of diffuse redness, reduction of striae, and reduction of scarring.

96. (ORIGINAL) The method of claim 94, wherein the selected treatment area is an area of at least 2 cm², and applying light energy to the selected treatment area includes:
generating pulses of light energy having a spot size on a portion of the selected treatment area of less than the selected treatment area;
distributing the pulses of light energy having over the selected treatment area.

97. (ORIGINAL) The method of claim 96, wherein pulses of light are applied to the selected treatment area for a time period of between approximately 1 minute to 5 minutes.

98. (ORIGINAL) The method of claim 96, wherein more than approximately 400 pulses are applied to the selected area.

99. (ORIGINAL) The method of claim 96, wherein the spot size is less than approximately 11 mm.

100. (ORIGINAL) The method of claim 96, wherein each of the pulses has fluence of between 8 J/cm² and 20 J/cm² and has a pulse duration of between approximately 100 microseconds and 3000 microseconds.

101. (NEW) The method of claim 41, wherein the heating effects collagen production.

102. (NEW) The method of claim 41, wherein heating the target tissue heats target skin tissue to a temperature of at least forty degrees Celsius